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| 11 > 2 1 | These characters end a text token because they signify the start of a field operator. (! is special: != ends a token.) |
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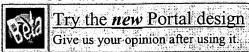
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[Abstract] [PDF Full-Text (224 KB)] **IEEE CNF**

3 Complex character positioning based on a compatible flow model of multiple supports

Boulic, R.; Mas-Sanso, R.; Thalmann, D.;

Visualization and Computer Graphics, IEEE Transactions on , Volume: 3 Issue:

July-Sept. 1997 Page(s): 245 -261

[Abstract] [PDF Full-Text (1360 KB)] IEEE JNL

4 Characterisation of objects and general ocean phenomena by use of t



Gjessing, D.T.; Saebboe, J.;

Radar, Sonar and Navigation, IEE Proceedings - , Volume: 149 Issue: 2 , April :

Page(s): 60 -69

[Abstract] [PDF Full-Text (544 KB)] IEE JNL

5 Radar characterization of ship wake signatures and ambient ocean cl features

Schurmann, S.R.;

Radar Conference, 1989., Proceedings of the 1989 IEEE National, 29-30 March Page(s): 182-187

[Abstract] [PDF Full-Text (484 KB)] IEEE CNF

6 Observations of the spatial structure of internal waves in a small mid-latitude lake

Laval, B.; Bird, J.S.; Helland, P.D.;

OCEANS '97. MTS/IEEE Conference Proceedings, Volume: 1, 6-9 Oct. 1997

Page(s): 235 -240 vol.1

[Abstract] [PDF Full-Text (720 KB)] IEEE CNF

7 Editing dynamic properties of captured human motion

Popovic, Z.;

Robotics and Automation, 2000. Proceedings. ICRA '00. IEEE International Con

on, Volume: 1, 24-28 April 2000

Page(s): 670 -675 vol.1

[Abstract] [PDF Full-Text (484 KB)] IEEE CNF

8 Stability and movement of a one-link neuromusculoskeletal sagittal a

Dinneen, J.A.; Hemami, H.;

Biomedical Engineering, IEEE Transactions on , Volume: 40 Issue: 6 , June 199

Page(s): 541 -548

[Abstract] [PDF Full-Text (588 KB)] IEEE JNL

9 Studies of dual polarized low grazing angle radar sea scatter in nears regions

Trizna, D.B.; Carlson, D.J.;

Geoscience and Remote Sensing, IEEE Transactions on , Volume: 34 Issue: 3 ,

1996

Page(s): 747 -757

[Abstract] [PDF Full-Text (1292 KB)] IEEE JNL

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| Member Services Join IEEE Establish IEEE Web Account Access the IEEE Member Digital Library | [Abstract] [PDF Full-Text (448 KB)] IEE CNF 2 Scanning probe microscopy-how does it work and what might you us for? Leckenby, J.; New Microscopies in Medicine and Biology, IEE Colloquium on , 1994 Page(s): 1 -3 |
| Print Format | [Abetract] [DDE Eull Toxt (149 KD)] TEE CNE |

[Abstract] [PDF Full-Text (148 KB)] IEE CNF

3 Standards implementation-the Message Text Format program

Military Communications Conference, 1991. MILCOM '91, Conference Record, 'I Communications in a Changing World'., IEEE , 4-7 Nov. 1991

Page(s): 316 -320 vol.1

[Abstract] [PDF Full-Text (304 KB)] **IEEE CNF**

4 Backward construction-a decomposed learning method for robot force/position control

Hai-Long Pei; Leung, T.P.; Qi-Jie Zhou;

Neural Networks, 1992. IJCNN., International Joint Conference on , Volume: 1

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| | [Abstract] | 「PDF Full-T | ext (236 KB) | l IEEE C | NF | | |

3 Using lexical knowledge for the recognition of poorly written words

Caesar, T.; Gloger, J.M.; Mandler, E.;

Document Analysis and Recognition, 1995., Proceedings of the Third Internatic

Conference on , Volume: 2 , 14-16 Aug. 1995

Page(s): 915 -918 vol.2

[Abstract] [PDF Full-Text (364 KB)] **IEEE CNF**

4 Random modulation and acoustic noise reduction in IM drives: a case Bolognani, S.; Di Bella, A.; Zigliotto, M.; Electrical Machines and Drives, 1999. Ninth International Conference on (Conf.

No. 468), 1-3 Sept. 1999

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Dynamic Regularisation of Intelligent Outline Fonts - Beat Stamm Institute (1993) (Correct) (1 citation) regularisation of the outlines without explicit grid-fitting, instructions, or hints. As a result, a single This is in contrast to [7]which performs **grid-fitting** by explicit instruction. Thus, we might cajun.cs.nott.ac.uk/compsci/epo/papers/volume6/issue3/stamma.pdf

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Analysing character shapes by string matching techniques - Herz, Hersch (1993) (Correct) logic remains implicit. This is the reason why grid-fitting systems require explicit knowledge that has to or even automatically, as could be the case for grid-fitting purposes)Let us proceed with a concrete cajun.cs.nott.ac.uk/wiley/journals/epobetan/pdf/volume6/issue3/hersch.pdf

New Cartesian Grid Methods For Interface Problems Using The .. - Li, Lin, Wu (Correct) those closely related to this paper. 1.1. Body fitting grid methods based on finite element is aligned with the interface (body fitting grid) This can be proved strictly in one difficult and time consuming to generate a body fitting grid for an interface problem in which the ftp.ncsu.edu/pub/ncsu/crsc/crsc-tr99-12.ps.Z

Data Structures and Implementation of Composite Adaptive Grid.. - Zhu, Oliger (Correct) of solving PDE's. One method is to use body fitting grid for the entire domain. The difficulty of this of using a composite grid over using a body fitting grid is that transformations are only needed near www-sccm.stanford.edu/students/xzhu/paper2.ps.gz

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Hinting in TrueType is a time-consuming manual process in which a typographer c for better fitting the characters of a font to a grid of pixels. In this paper, we propautomatically hinting TrueType fonts by transferring hints of one font to another. (target font without hints, our method matches the outlines of corresponding glyph

9/960,064

translates all of the individual hints for each glyph from the source to the target fo value table (CVT) entries, which are used to unify feature sizes across a font. The provides a great improvement over the unhinted version. More importantly, the tr the sound, hand-designed hinting structure of the original font, provide a very goc professional typographer to complete and fine-tune, saving time and increasing pr approach with examples of automatically hinted fonts at typical display sizes and so provide estimates of the time saved by a professional typographer in hinting new approach.

↑ REFERENCES

Note: OCR errors may be found in this Reference List extracted from the full text at the complete List rather than only correct and linked references.

- 1 Adobe Systems, Inc. Adobe Type 1 Font Format, March 1990.
- 2 Sten E Andler. Automatic generation of gridfitting hints for rasterization of outle Proceedings of the International Conference on Electronic Publishing, Document M pages 221-234, September 1990.
- 3 Apple Computer, Inc. The TrueType Font Format Specification, 1990. Version 1
- 4 Claude B6trisey. G~n~ration Automatique de Contraintes pour CaractOres Typ ModOle Topologique. PhD thesis, I~cole Polytechnique F6d6rale de Lausanne, 199
- 5 Roger D. Hersch, Character generation under grid constraints, Proceedings of t Computer graphics and interactive techniques, p.243-252, August 1987
- 6 Roger D. Hersch, Claude Betrisey, Model-based matching and hinting of fonts, conference on Computer graphics and interactive techniques, p.71-80, July 1991
- 7 Beat Stature. Visual TrueType: A graphical method for authoring font intelligen and H. Brown, editors, Electronic Publishing, Artistic Imaging, and Digital Typograp 1998.

↑ CITINGS 2

Ariel Shamir, Constraint-based approach for automatic hinting of digital typefaces, (TOG), v.22 n.2, p.131-151, April 2003

William T. Freeman, Joshua B. Tenenbaum, Egon C. Pasztor, Learning style trans ACM Transactions on Graphics (TOG), v.22 n.1, p.33-46, January 2003

小 INDEX TERMS

Primary Classification:

I. Computing Methodologies

→ I.7 DOCUMENT AND TEXT PROCESSING

Additional Classification:

I. Computing Methodologies

→ I.4 IMAGE PROCESSING AND COMPUTER VISION

→ I.4.7 Feature Measurement

Subjects: Size and shape

☐ I.4.8 Scene Analysis

Subjects: Shape

← I.5 PATTERN RECOGNITION

→ I.5.2 Design Methodology

Subjects: Feature evaluation and selection

← I.7 DOCUMENT AND TEXT PROCESSING

General Terms:

Design, Documentation, Measurement, Performance, Theory

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